

DOCUMENT RESUME

ED 238 846

SP 023 479

AUTHOR McClaran, Diane M.; Breakey, Robin Sarris
 TITLE Attitudes, Knowledge, and Behavior Before and After
 an Undergraduate Health and Lifestyle Course.
 PUB DATE [81]
 NOTE 9p.
 PUB TYPE Reports - Evaluative/Feasibility (142)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Behavior Change; Drug Education; Exercise; *Health
 Education; Higher Education; Life Style; Nutrition;
 *Program Effectiveness; *Self Care Skills; Smoking;
 Stress Management; *Student Attitudes; Student
 Behavior; *Undergraduate Students

ABSTRACT

A one credit mini-course consisting of six two-hour seminars exploring concepts of health promotion and personal responsibility for health was offered to undergraduate students. The course included in-depth coverage of health-related decisionmaking processes, effective strategies for changing personal behaviors, self care for common illnesses, stress management, nutrition, exercise, alcohol, tobacco, and drugs. In addition to class attendance and required reading, students chose between an individual project aimed at developing and carrying out a plan for a self-directed behavior change, or a paper written from the perspective of a health provider addressing a health problem and related behavior changes. Students' attitudes, knowledge, and behaviors were measured before and after the course. Overall, the results show a gain in knowledge as well as positive changes in attitudes and behaviors. (Author/JD)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED238846

ATTITUDES, KNOWLEDGE, AND BEHAVIOR
BEFORE AND AFTER AN UNDERGRADUATE HEALTH AND LIFESTYLE COURSE

Diane M. McClaran, MA, MPH
Coordinator of Health and Continuing Education

Robin Sarris Breakey, MPH
Health Educator

Health and Continuing Education
University Health Service
University of Michigan
207 Fletcher Avenue
Ann Arbor, Michigan 48109

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Diane M. McClaran
Robin Sarris Breakey

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

ATTITUDES, KNOWLEDGE, AND BEHAVIOR
BEFORE AND AFTER AN UNDERGRADUATE HEALTH AND LIFESTYLE COURSE

Diane M. McClaran, MA, MPH

Robin Sarris Breakey, MPH

Abstract

A one credit mini-course consisting of six two-hour seminars exploring concepts of health promotion and personal responsibility for health was offered to undergraduate students. The course included in-depth coverage of: health-related decision making processes, effective strategies for changing personal behaviors, self care for common illnesses, stress management, nutrition, exercise, alcohol, tobacco and drugs. In addition to class attendance and required reading, students chose between an individual project aimed at developing and carrying out a plan for a self-directed behavior change; or a paper written from the perspective of a health care provider addressing a health problem and related behavior change strategies.

Students' attitudes, knowledge and behaviors were measured before and after the course. Overall, the results show a gain in knowledge as well as positive changes in attitudes and behaviors.

Introduction

College students are often acting independently for the first time in their lives, forced to make decisions ranging from choosing what to eat, what career to pursue or when to seek medical care. Away from the guidance of their families -- the traditional source of primary care -- they may not possess the knowledge or the skills to make the most appropriate decisions.^{1,2}

Many students complain that while they have great interest in various

health education topics, they are often unable to attend such programs due to the time constraints levied by classwork, studying, employment and social activities. Given that attitudes and values affecting health-related behavior may be established or influenced during this time and that these behaviors may affect students' health in the years to come, it seems important that these real or perceived barriers to accessing health-related information be transcended.

Course Description

Toward this end a one credit mini-course, "Health and Lifestyle", was developed, and consisted of six two-hour seminars exploring the concepts of health promotion and personal responsibility for health. The course included the following topics: individual responsibility for health; incidence of chronic disease in the United States; health-related values clarification and decision making; self-care for common illnesses; self-directed behavior change strategies; stress management; alcohol, tobacco, and drugs; and nutrition and exercise. Topics were chosen based on: an interest survey of 1,242 undergraduate students done previously at this University; a similar, original study conducted at Dartmouth College³; recommendations from the Surgeon General's report, Healthy People⁴; and relevant literature review.^{5,6}

Course requirements included readings related to the lecture topics, and class attendance. Students were also required to complete an individual project, which consisted of either a program plan for changing a personal health-related behavior; or a paper written from the perspective of a health care provider addressing a health problem in a young adult population and related behavior change strategies. Students' attitudes, knowledge and behaviors on a variety of health concerns were measured before and after the course.

While the course was open to the entire undergraduate student body, it was

primarily directed toward freshmen and sophomores. Two full time Health Educators from the University Health Service taught the course, which was offered once per semester Fall and Winter 1982-83. Therefore this study examines two cohorts of participants.

Methods

The primary evaluation instrument was the questionnaire assessing attitudes, behavior and knowledge before and after the course. Additional anecdotal information was gathered through student projects regarding self-directed behavior change. The course itself and the instructors were also evaluated through anonymous written forms completed after the last class session.

The before/after questionnaire was developed by the authors after examining existing questionnaires used to assess health behaviors and attitudes in other university settings.^{7,8} The questionnaire was pilot tested on a group of University students and subsequently revised.

A One-Group Pretest-Posttest Design⁹ was used to assess changes in attitudes, knowledge, and behavior. Due to situational constraints it was not possible to establish a comparison group nor to control for possible confounding variables such as: history, maturation, and testing effects. In addition, the groups were not randomly selected, as this is not generally feasible in a university course setting. It is possible that students who enrolled in this course were particularly interested in or aware of health-related issues, or perhaps they may have had more health problems than the general population. Either of these possibilities could have led to greater or lesser changes than might be found in a randomly selected group. However, the fact that a non-mandatory course in an academic setting will be taken by a self-selected group should not present a problem as long as the results are not generalized beyond the group that was studied. This design is widely used in

educational research and is worth doing when a more rigorous design is not possible.⁹

Results

A total of 85 students (42 in Group 1, Fall Term; and 43 in Group 2, Winter Term) completed "Health and Lifestyle" during the 1982-83 academic year. Of these students, approximately 74% were female and 26% were male. The group consisted primarily of Seniors (53%), followed by Juniors (19%), Sophomores (18%), and Freshmen (9%). The composition of the two cohorts was very similar in that Seniors and Freshmen were the largest and smallest contingents respectively. However, Group 1 consisted of 35% Sophomores and 13% Juniors, whereas in Group 2 Sophomores made up only 6% of the class and Juniors 24%.

The predominance of Seniors, followed by a descending number of lower division students, may be accounted for by the fact that Seniors receive priority at registration so that the popularity of the course prevents those who register later from entering. This was counter to the intended audience and course description, which encouraged freshmen and sophomore participation. In the future, it may be necessary to restrict enrollment to this group in order to reach them in greater numbers.

Statistical analysis of questionnaire items using a before/after t-test comparison yielded the following results: students' health behaviors showed significant ($p < .05$) positive changes in personal intake of salt, fats and oils, sugar, alcohol and number of times/week spent vigorously exercising for at least 20 minutes. On the other hand, students were significantly ($p < .05$) less likely to wear their seat belts when driving or riding in a car. This may indicate a need to place greater emphasis on safety issues within the course, especially concerning the use of seat belts.

As regards health-related attitudes: significant ($p < .05$) changes occurred

such that overall, students stated that they felt better about themselves, felt more comfortable expressing anger to others and felt more strongly that they could prevent themselves from becoming ill. In addition, Group 1 also showed significant ($p < .05$) changes in gathering information to make independent decisions, and expressing their own values. These scores were not significant for Group 2, which did, however, feel that it was less difficult for them to make important decisions.

There were two questions which were directly and specifically related to knowledge. The first referred to knowing one's blood pressure and the second to knowing where to get help if emergency care was needed. Neither of these issues was directly addressed in class. There was no significant change in knowledge for either question. However, the behavior changes seen in the areas of nutrition and exercise seem to indicate that students did gain the knowledge necessary to make the positive behavior changes which were evidenced.

The class projects were overwhelmingly successful. Students demonstrated an understanding of behavior change concepts, were able to design program plans for themselves, and in many cases made successful behavior changes. The most often attempted changes concerned nutrition and exercise, with stress-related projects being the third most popular. This is consistent with the statistical data, in that these were also the areas that showed the most significant changes.

Comments obtained through open-ended evaluation forms indicated that students found the course valuable; many felt "it should be required for all freshmen"; that it contained some of "the most valuable information" they had learned at the University; and that it should be expanded to allow for more in-depth coverage of existing topics as well as the addition of new topics not presently included (e.g. sexually transmitted diseases, contraception). In

addition, the course has been successful as evidenced by both sections filling quickly to capacity and requiring a long waiting list of interested students. Future expansion may help to alleviate this problem.

Conclusions

The health maintenance and lifestyle course for academic credit appears to offer a workable and effective mechanism for providing health information as well as behavior change skills to the student population under severe time constraints. The positive response, seen through student comments and general interest in the course shown through the enrollment demand, indicates that not only are college students interested in learning health information, they are enthusiastic about the subject. The significant changes in health-related behaviors, attitudes and underlying knowledge suggest that this format is successful in promoting at least short-term behavior change. Long-term effects can not be assumed without further study.

The expansion of such courses both in depth and breadth is recommended. To the extent possible, more rigorous research studies are needed to definitively measure the program's effectiveness in promoting positive attitude, knowledge and behavior change.

References

- 1) Comstock L, Sloane C. A Health Survey of Students: (1) Prevalence of Perceived Problems. *J Amer Coll Health Assoc* 1973 Dec; 22(2):150-158
- 2) Kolbe L, Iverson D. An Assessment of Student Health Needs, Implications for the Planning and Utilization of College Health Services. *J Amer Coll Health Assoc* 1978 April; 26(5):263-266
- 3) Conant B, Feldman M, Jackson RS. Developing An Adaptable Health Interest Survey for College Health Education. Unpublished study, 1981
- 4) The Surgeon General's Report on Health Promotion and Disease Prevention. *Healthy People*. US HEW Pub. No. 79-55071, 1979.
- 5) Sutherland M. Relevant Curriculum Planning in Health Education: A Methodology. *J Sch Health* 1979 Sep; 49:387-389
- 6) Duncan D, Russell R, Petosa R. Educational Outreach: An Experimental Evaluation of Wellness Center Involvement in Classes. *Health Values* 1980 Sept-Oct; 4(5):234-236
- 7) Hettler B. Wellness Promotion in A University Campus. *Fam Community Health* 1980 May; 3(1):77-95
- 8) Vierke S. The Lifestyling Program; Moving Toward High Level Wellness. *Health Values* 1980 Sept-Oct; 4(5):237-241
- 9) Campbell D, Stanley J. *Experimental and Quasi-Experimental Designs for Research*. Chicago, Rand-McNally College Publishing Co., 1963.